heterogeneity should be conducted, and approaches illustrated here can be useful to explore heterogeneity. Further evaluation of the value of patient-level as opposed to summary-level data in heterogeneity assessment is needed.

PRM11

A COMPARISON OF OUTCOMES IN CLINICAL TRIALS CONDUCTED WITHIN THE UNITED STATES VERSUS OUTSIDE THE UNITED STATES

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OBJECTIVES: The defining characteristics of a disease condition are the same across all countries. Therefore, we hypothesize that when assessing a new treatment, via a clinical trial, we would expect different countries to value the same outcomes irrespective of where the trial was completed. We chose three disease conditions that are identified by exact biomarkers to test this hypothesis. **METHODS:** We collected all open, actively enrolling, phase III drug studies from www.clinicaltrials.gov for Multiple Sclerosis, Hepatitis C, and HIV. After eliminating non-interventional studies and studies with missing information, we were left with 39 Multiple Sclerosis, 33 HIV, and 40 Hepatitis C trials. We defined three study locations: "U.S. only," "ex-U.S. only," and "U.S. and ex-U.S." Among Multiple Sclerosis studies, 13 were U.S.-only, 15 ex-U.S. only, and 11 were U.S. and ex-U.S. Among HIV studies, 3 were U.S.-only, 19 ex-U.S. only, and 11 were U.S. and ex-U.S. Among Hepatitis C studies none were U.S. only, 23 ex-U.S., and 17 were U.S. and ex-U.S. Fisher's exact test was used to examine associations between study locations and types of clinical trial outcomes measured. **RESULTS:** We found no statistically significant differences in the outcomes evaluated by Multiple Sclerosis studies or HIV studies. Four of the 11 Hepatitis C outcome categories evaluated different outcomes depending on location: Sustained Virologic Response Week 12 (p-value 0.0011), Laboratory (p-value 0.0525), AEs (p-value 0.0235), and Safety (p-value 0.0227). **CONCLUSIONS:** Our results support our hypothesis for two of the three conditions we examined, Multiple Sclerosis and HIV. However, for Hepatitis C, we found that clinical trials outcomes differ by location. The recent surge in development in Hepatitis C drugs may explain the discrepancy; however, further research and more data is needed.

PRM12

NETWORK META-ANALYSIS OF SURVIVAL DATA. THE VALUE OF RECONSTRUCTING DATA FROM PUBLISHED KAPLAN-MEIER CURVES

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OBJECTIVES: Network meta-analysis of published survival data are often based on the reported hazard ratio. In this paper we illustrate the value of reconstructing data from published Kaplan-Meier curves to perform network meta-analysis. **METHODS:** Published Kaplan-Meier survival curves of trials evaluating different interventions for non-small-cell lung cancer were digitally scanned. Next, a dataset was created with for each treatment of each trial the number of events and number of patients at risk for multiple short time intervals over the complete follow-up period. Two types of network meta-analyses were performed: 1) For each publication for which no hazard ratio was reported, a hazard ratio was estimated based on the scanned curves. Subsequently, all hazard ratios of all trials were synthesized with a network meta-analysis model assuming a constant hazard ratio (2-step approach); 2) A network meta-analysis of the constructed data of the Kaplan-Meier curves of all trials was performed (1-step approach). **RESULTS:** The 1-step approach showed that the assumption of a constant hazard ratio was not valid for the used dataset. The results of the 1-step network meta-analysis could be presented as pooled parametric survival curves. **CONCLUSIONS:** Reconstructing data from published Kaplan-Meier curves allows for the inclusion of all relevant studies in a network meta-analysis, even if hazard ratios are not reported. Furthermore, it allows for network meta-analysis models that do not rely on the assumption of a constant hazard ratio, which have great value for cost-effectiveness models.

PRM13

NETWORK META-ANALYSIS OF LONGITUDINAL DATA

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OBJECTIVES: In the last decade, network meta-analysis (mixed treatment comparison meta-analysis) has been introduced as a generalization of pair-wise meta-analysis. Many randomized controlled trials (RCTs) report treatment effect estimates for the outcomes of interest at multiple time points. In this paper we compare different methods for network meta-analysis of repeated measures. **METHODS:** Different network meta-analysis models for the synthesis of study level data of RCTs evaluating interventions for osteoarthritis were compared: separate network meta-analyses per time point; models assuming a linear development of treatment effects over time; network meta-analysis models with fractional polynomials; and network meta-analysis with splines. All analyses were performed in a Bayesian framework. **RESULTS:** The primary limitation of multiple network meta-analyses of study level data by time point was the inconsistency in the used evidence base for each time point. Of the models that estimate a relationship between outcome and time, fractional polynomials had an advantage over splines for the current dataset because the former model resulted in more stable parameter estimates and still provided sufficient fit to the data. **CONCLUSIONS:** To understand treatment effects over time, reported treatment effects of RCTs need to be synthesized simultaneously. Network meta-analysis of longitudinal study level data with second order fractional polynomials are a very useful approach to evaluate trends of treatment effects over time when there is not too much variation in treatment effects from one time point to the next. An additional advantage is that the methodology can handle differences in follow-up time across trials.

PRM14

EFFECT OF L-CARNITINE ON BEHAVIORAL DISORDER IN AUTISTIC CHILDREN

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OBJECTIVES: 1) To Study the effect of L-carnitine supplementation on behavioral symptoms in autistic children; 2) Study the effect of l-Carnitine supplementation on Acyl-Carnitine profile of Autistic children; 3) Detect possible correlation between the blood Carnitine status and Autistic behavior; and 4) Tolerability assessment of l-carnitine supplementation. **METHODS:** Thirty children diagnosed with autism were randomly assigned to receive (100 mg/kg bodyweight/day) of liquid l-carnitine (n=16) or placebo (n=14) for 6 months. Measurements included changes in childhood autism rating scale (CARS) form and free and total carnitine levels using tandem mass spectrometry. **RESULTS:** Results showed significant improvement in CARS scores (P-groups <0.001) and (P-overtime= 0.006), with statistically significant differences in free carnitine levels (P=0.027) and total carnitine levels (P=0.036) . There was no correlation between baseline free and total carnitine levels with changes in CARS scores from zero to 6 months (r > 0.5 , P> 0.05) and generally L-carnitine therapy was well tolerated. In conclusion, L-carnitine therapy (100 mg/kg-bodyweight/day) administered for 6 months significantly improved the autism severity, but subsequent studies are recommended. **CONCLUSIONS:** 1) Significant differences were found in free and total carnitine levels after therapy; 2) Clinically, L-carnitine supplementation improves autism severity; 3) L-carnitine therapy was well tolerated; and 4) L-carnitine supplements may be given as part of autism treatment regimen.

PRM15

PLEASE PASS THE NEW TEMPLATE: DEVELOPING NON-INTERVENTIONAL STUDY REPORT WRITING TEMPLATES ALIGNED WITH GUIDELINES

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OBJECTIVES: Post-authorization interventional clinical trials (CT) and non-interventional clinical studies (NIS) are increasingly used to evaluate safety and other outcomes in real-world settings. Previously, NIS clinical study report (CSR) templates used International Society for Pharmacoepidemiology (ISPE; www.pharmacoepi.org) reporting guidelines and/or were modified from International Conference on Harmonisation (ICH) E3 guidelines. Resulting CSR templates may not have contained adequate instructions to develop CSRs for regulatory review and subsequent corresponding manuscripts. We reviewed various published documents and developed robust NIS CSR templates for use in regulatory submission. **METHODS:** Guidelines reviewed included ISPE (based on FDA guidance and EU documents) and Guideline on Good Pharmacovigilance Practices – module VIII (www.ema.europa.eu), which describes post-authorization safety studies (PASS) and updated CSR guidelines, following implementation of revised pharmacovigilance legislation in July 2012. For NIS manuscripts, STROBE (STrengthening the Reporting of oBservational studies in Epidemiology) guidelines (www.strobe-statement.org) were reviewed. We also reviewed other NIS-related documents, as well as interventional CT-related documents, including ICH CSR guidelines and CONSORT (CONsolidated Standards of Reporting Trials) or other design-specific guidelines (www.equator-network.org) for writing corresponding manuscripts. Additional instructional and preferred/optional text was developed for the templates. **RESULTS:** Overall, PASS guidelines provided additional NIS details and were aligned with most regulatory sections common in ISPE and aligned closely with STROBE statements. ISPE guidelines provided few details for CSR template development. Other guidelines and a literature review provided additional CSR template text and the inclusion of STROBE–based text supported development of manuscripts. By utilizing multiple document sources, new templates were developed that contained improved instructions and text while meeting regulatory requirements. Furthermore, decision trees were included to support the numerous types of NIS study designs. **CONCLUSIONS:** By aligning CSR guidelines with design-specific publication guidelines, template quality was improved for regulatory submissions and authors could easily identify important report content when writing peer-reviewed publications.

PRM16

CLINICAL OUTCOME OF FLOUORO-2,DEOXY-GLUCOSE POSITRON EMMISSION TOMOGRAPHY/ COMPUTED TOMOGRAPHY [FDG PET/CT] IN BREAST CANCER PATIENTS- STUDY BASED ON ITS REFFERAL PATTERN

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OBJECTIVES: To assess the referral patterns and impact for FDG PET/CT for treatment management, and to determine the most common metastatic sites in breast cancer patients. **METHODS:** Retrospective analysis was performed on 2,500 scans reported in Max hospital from November 2009 to March 2012, scans for breast cancer patients were separated out (500 scans). Medical records of 122 consecutive breast cancer patients were retrospectively reviewed. Referral categories for PET/CT in breast cancer patients were: Diagnosis, Staging, Restaging, Early treatment response evaluation (after 3 cycles of chemotherapy), late treatment response evaluation (after 6 cycles of chemotherapy), and Radiation therapy response evaluation. **RESULTS:** PET/CT was mostly used for